
Quinones are redox-active molecules with good electrochemical reversibility and reaction rates. They are a class of metal-free organic compounds that consist of earth ...

Based on a model for rapid property prediction, we constructed over 100,000 virtual quinone molecules, evaluated their performance as active substances in redox flow batteries, ...

Redox flow batteries (RFBs) rely on the development of cheap, highly soluble, and high-energy-density electrolytes. Several candidate quinones have already been investigated in the ...

Alkaline Quinone Flow Batteries (AQFBs) are emerging as a promising solution for large-scale energy storage. They leverage innovative chemistry and design to provide reliable, ...

Quino Energy has developed a process that converts quinone raw materials - dyestuff chemicals - directly into high-performance, long lifetime quinones using the flow battery system itself as ...

Aqueous organic flow batteries hold great promise to store massive electricity generated from intermittent renewables. Tremendous efforts have been made in tailoring ...

Quino Energy has developed a process that converts quinone raw materials - dyestuff chemicals - directly into high-performance, long lifetime ...

Quino Energy is a start-up company that is developing water-based flow batteries that store electrical energy in organic molecules called quinones, for commercial and grid ...

We demonstrate a long-lifetime, aqueous redox-flow battery that can operate at a pH as low as 12 while maintaining an open-circuit voltage of over 1 V. We functionalized 2,6 ...

This review article provides a comprehensive overview of recent progress in this area, with a specific focus on redox potential, solubility, and stability, and offers valuable ...

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